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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TATE, CHRISTOPHER ROBIN

ART UNIT	PAPER NUMBER
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1654

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/648,648	Applicant(s) CHOUDHRY, MUHAMMAD S.	
	Examiner Christopher R. Tate	Art Unit 1654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claims 1-10 are presented for examination on the merits.

Specification

The abstract of the disclosure is objected to because it is more than one paragraph in length. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rendered vague and indefinite for the following reasons:

- It contains various grammatically incorrect and/or confusing phrases therein: e.g., "subjects complaining muscle cramping" (it is suggested that the term --of-- be inserted before "muscle" in this phrase); "administering rehydrating beverage with an effective amount" (it is suggested that this phrase be amended to recite --administering a rehydrating beverage containing an effective amount--); "and D-ribose a sufficient time" (it is suggested that the term --for-- be inserted after "D-ribose" in this phrase); "whereby the effect of Rhodiola crenulata and D-ribose is effective" (it is suggested that this phrase be amended to recite --whereby the Rhodiola crenulata and D-Ribose are in amounts effective--).

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Claim 1 is also rendered vague and indefinite because it is unclear as to who or what the rehydrating beverage is administered to (e.g., --said subjects-- or someone/something else?), as well as to enhance blood oxygen and to reduce blood levels of lactic acid of who or what (e.g., --in said subjects-- or in someone/something else?).

Claim 1 is further rendered vague and indefinite because it is unclear as to how the method would actually be performed. For example, if the subjects are already complaining about exercise-induced muscle cramping and soreness, how could you administer the claimed beverage prior to the exercising? In other words, if this is how the instant claim is qualifying the subject, it is unclear how the claimed beverage could be administered to such a subject (a subject already experiencing muscle soreness and cramping due to exercise) prior to actually doing the exercise which would cause the soreness and cramping.

Claim 5 is rendered vague and indefinite by the phrase "A ... beverage comprising an effective amount of Rhodiola crenulata and D-ribose" - i.e., effective for what (especially since no intended use is recited)?

Claim 6 recites the limitation "The method according to claim 5". There is insufficient antecedent basis for this limitation in the claim.

All other claims depend directly or indirectly from rejected claims and are, therefore, also rejected under USC 112, second paragraph for the reasons set forth above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xiu (6,399,116), in view of Portman (US 5,585,101) and Butler (US 6,159,943) - with evidence provided by Clark (US 4,738,856).

A rehydrating beverage composition comprising *Rhodiola crenulata* and D-ribose is claimed, as is a method of enhancing blood oxygen in exercising-induced subjects complaining of muscle cramping and soreness via administering such a rehydrating beverage thereto prior to exercising.

Xiu beneficially teaches a composition for enhancing working capacity and/or reducing muscle fatigue due to such activities as exercise (via enhancing blood oxygen levels so as to increase muscle ATP levels as well as reduce lactic acid levels) comprising result-effective amounts (including within the instantly claimed amount range) of *Rhodiola crenulata* therein, whereby the composition may be given to the host even before such muscle fatigue would occur (see, e.g., abstract; col 1, lines 5-13; col 4, lines 20-42, col 6, lines 29-62; Examples 1-3; and claims). Xiu further advantageously discloses that the composition may be in the form of a beverage additive, and that the composition may also be formulated to include other active ingredients therein including D-ribose; as well as suitable carriers including water, flavoring sodium compounds, citric acid, and glucose (see, e.g., col 2, line 24 - col 3, line 21). Although not expressly taught by Xiu, it is notoriously well known in the medical art that there is a strong recognized correlation between lactic acid buildup and muscle soreness and cramping during exercise - i.e., lactic acid is the primary reason for muscle fatigue and soreness (as disclosed by

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Portman - see, e.g., col 1, lines 42-47) as well as cramping. Xiu also does not expressly teach combining *Rhodiola crenulata* and D-ribose within such a beverage, nor the amount of D-ribose to use therein.

Butler et al. beneficially teaches a composition comprising result-effective amounts of D-ribose (within the instantly claimed amount ranges) for reducing muscle fatigue, soreness, and cramping due to physical exercise apparently caused by hypoxia (which is medically defined as a reduction of the oxygen carrying capacity of the blood - Dorland's Medical Dictionary, 1988) - i.e., exercising causes hypoxic muscles which results in ATP degradation due to anaerobic shifting and, thus, glycolytic lactic acid buildup therein (see, e.g., col 1, line 1 - col 2, line 23; Examples; and claims). Butler et al. also beneficially teach that such a D-ribose formulation may administered before or after exercise and that it is can be mixed in any convenient liquid (such as tea or coffee - both of which contain caffeine) and can easily be provided as an additive to various other aqueous beverages such as Gatorade™ (please note, as evidenced by Clark - col 3, lines 26-31 - Gatorade™ inherently contains flavoring, glucose, citric acid, and sodium).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to prepare and provide an aqueous beverage composition comprising the instantly claimed ingredients for treating muscle fatigue, soreness, and/or cramping to a subject in need thereof, either before or after exercising, based upon the beneficial teachings provided by the cited references. The result-effective adjustment of particular conventional working conditions (e.g., determining appropriate amounts of such ingredients within a beverage additive used for treating/relieving muscle fatigue, soreness and/or cramping) is deemed merely a matter

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of judicious selection and routine optimization which is well within the purview of the skilled artisan.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Xiu (6,399,116), in view of Portman (US 5,585,101) and Butler (US 6,159,943), as applied to claims 1-7, 9, and 10 above, and further in view of Golini (US 6,399,661).

Xiu, Butler, and Portman are relied upon for the reasons set forth above. None of these references expressly teach the further inclusion of sucralose as a sweetener within such a muscle fatigue-treating composition.

Golini teaches the inclusion of the sweetener sucralose within an oral (e.g., beverage additive) muscle fatigue-treating composition (see, e.g., col 2, line 66 - col 3, line 12).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to combine the instant ingredients (including the commonly employed sweetener sucralose) for their known benefit since each is well known in the art for the same purpose (e.g., within a muscle fatigue-treating composition) and for the following reasons. It is well known that it is *prima facie* obvious to combine two or more ingredients each of which is

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taught by the prior art to be useful for the same purpose (as well as to use such a composition for that purpose - e.g., treating muscle fatigue, soreness, cramping) in order to form a third composition which is useful for the same purpose. The idea for combining them flows logically from their having been used individually in the prior art. *In re Kerkhoven*, 205 USPQ 1069 (CCPA 1980); *In re Sussman*, 1943 C.D. 518; *In re Pinten*, 459 F.2d 1053, 173 USPQ 801 (CCPA 1972); *In re Susi*, 58 CCPA 1074, 1079-80; 440 F.2d 442, 445; 169 USPQ 423, 426 (1971); *In re Crockett*, 47 CCPA 1018, 1020-21; 279 F.2d 274, 276-277; 126 USPQ 186, 188 (1960). The result-effective adjustment of particular conventional working conditions (e.g., determining appropriate amounts of such ingredients within a beverage additive used for treating/relieving muscle fatigue, soreness and/or cramping, as well as adding the commonly-employed sweetener sucralose thereto) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

Thus, the invention as a whole is *prima facie* obvious over the references, especially in the absence of evidence to the contrary.

Conclusion

No claim is allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Tate whose telephone number is (571) 272-0970. The examiner can normally be reached on Mon-Thur, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on (571) 272-0974. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher R. Tate
Primary Examiner
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